§ 74.644 Minimum path lengths for fixed links.

(a) The distance between end points of a fixed link must equal or exceed the value set forth in the table below or the EIRP must be reduced in accordance with the equation set forth below.

<table>
<thead>
<tr>
<th>Frequency band (MHz)</th>
<th>Minimum path length (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 1,990</td>
<td>n/a</td>
</tr>
<tr>
<td>1,990–7,125</td>
<td>17</td>
</tr>
<tr>
<td>12,200–13,250</td>
<td>5</td>
</tr>
<tr>
<td>Above 17,700</td>
<td>n/a</td>
</tr>
</tbody>
</table>

(b) For paths shorter than those specified in the Table, the EIRP shall not exceed the value derived from the following equation.

\[
EIRP = \text{MAXEIRP} - 40 \log(A/B) \text{ dBW}
\]

Where:

- \( EIRP \) = The new maximum EIRP (equivalent isotropically radiated power) in dBW.
- \( \text{MAXEIRP} \) = Maximum EIRP as set forth in the Table in § 74.636 of this part.
- \( A \) = Minimum path length from the Table above for the frequency band in kilometers.
- \( B \) = The actual path length in kilometers.

NOTE 1 TO PARAGRAPH (b): For transmitters using Automatic Transmitter Power Control, EIRP corresponds to the maximum transmitter power available, not the coordinated transmit power or the nominal transmit power.

NOTE 2 TO PARAGRAPH (b): Stations licensed based on an application filed before April 16, 2003, in the 2450–2483.5 MHz band, for EIRP values exceeding those specified above, may continue to operate indefinitely in accordance with the terms of their current authorizations, subject to periodic renewal.

(c) Upon an appropriate technical showing, applicants and licensees unable to meet the minimum path length requirement may be granted an exception to these requirements.

NOTE: Links authorized prior to April 1, 1987, are excluded from this requirement, except that, effective April 1, 1992, the Commission will require compliance with the criteria where an existing link would otherwise preclude establishment of a new link.

[52 FR 7143, Mar. 9, 1987, as amended at 68 FR 12771, Mar. 17, 2003]